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EXAMINER

VU, MICHAEL T

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/802,391 | Applicant(s) HWANG ET AL. | |
| | Examiner MICHAEL T. VU | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-64 and 66-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-62, 64 and 66-68 is/are rejected.
- 7) ☒ Claim(s) 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 50-64, 66-68 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 06/14/2010 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 50-62, 64, 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnarajah et al (US 2002/0191556) in view of Bender et al (US 6,539,030).**

Regarding claims 50, 53, 60, 61, 62, 64, 66, and 67, Krishnarajah teaches a method of configuring a radio uplink (Fig. 1 shows a radio access system that

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configured a radio uplink) comprising: receiving at a network element information having both a cell specific parameter and a radio link specific parameter (Fig. 1 shows a RNC #26 received information having cell and a radio link, see RNC connected to Node/Base Stations means radio link and divided into cells each cell served by a base station [0005]), in respective messages on an interface between the network element and a radio network controller for configuring the radio uplink from a user equipment to the network element (Fig. 1 shows interfaced/configured messages between the RNC #26 and MS #30, see Fig. 4A radio setup/configuration message/information, and Fig. 7A shows payload), configuring the radio uplink at the network element (Fig. 1 shows a RNC #26 received information having cell and a radio link, see RNC connected to Node/Base Stations means radio link and cells), and receiving a payload packet from the user equipment to the network element over the radio uplink after the uplink is configured at the network element (Fig. 1 shows interfaced/configured messages between the RNC #26 and MS #30, see Fig. 4A radio setup/configuration message/information, and Fig. 7A shows payload), and [0018], [0053-0055],

Krishnarajah does not explicitly disclose wherein at least one of said respective messages enables said configuring the radio uplink.

However, Bender discloses wherein at least one of said respective messages enables said configuring the radio uplink (Figs. 7A-7B show radio network receives configuration-request message and identifies each type), and (see configuring a layer or protocol prior to commencement of data communication between a first entity (e.g., an access terminal) and a second entity (e.g., a data network, Col. 2 lines 44-45).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krishnarajah, with Bender's teaching, in order to enhance the performance of the radio resources for supporting the mobile station in the use of radio interface that support the air interface protocols in an efficiently to ensure a level of compatibility such as data, voice, video-streaming, multimedia, email, etc. within a mobile communications network.

Regarding claim 51, Krishnarajah and Bender teach the method of claim 50, Krishnarajah further teaches comprising: acknowledging correct reception of the payload packet at the network element on a radio downlink from the network element to the user equipment (acknowledge message [0072]), and sending the payload packet from the network element to the radio network controller following said correct reception from the user equipment (response message [0072], and headers adaptation [0023]).

Regarding claim 52, Krishnarajah and Bender teach the method of claim 50, Krishnarajah further teaches wherein said receiving by said network element includes receiving at least one parameter indicative of boundaries within which choices may be made by said network element (handover process [0025], [0049]).

Regarding claim 54, Krishnarajah and Bender teach the method of claim 53, wherein said sending by said radio network controller includes sending at least one

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parameter to said network element indicative of boundaries within which choices may be made by said network element (connection setup [0049]).

Regarding claim 55, Krishnarajah and Bender teach the method of claim 53, Krishnarajah further teaches sending the information on an interface between the radio network controller [0025, [0049] and another radio network controller for relay to another network element for configuring an uplink between the other network element and the user equipment (connection setup [0049]).

Regarding claim 56, Krishnarajah and Bender teach the method of claim 53 Krishnarajah further teaches wherein prior to said sending said information element on said interface between said network element (interface and value ranges [0021]) and said radio network controller (RNC [0042]), said radio network controller decides a value for said cell specific parameter or said radio link specific parameter, **or** both, for said sending said information element with said cell specific parameter and said radio link specific parameter in said one or more messages on said interface from said radio network controller to said network element (first access network and second access network [0042]).

Regarding claim 57, Krishnarajah and Bender teach the method of claim 53, wherein said radio network controller is responsive to signaling from said network element with a proposed value or values for said cell specific parameter, said radio link

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specific parameter, **or** both, and said radio network controller carries out said sending said information element either confirming or changing said proposed value or values.

Regarding claim 58, Krishnarajah and Bender teach the method of claim 55, Krishnarajah further teaches wherein said configuring the uplink between the other network element (interface [0040-0042]) and the user equipment comprises configuring the uplink between the other network element and the user equipment followed by sending the payload packet from the user equipment to the other network element over the radio uplink between the user equipment and the other network element for sending the payload packet to the radio network controller (connection setup [0049] and [0040-0042]).

Regarding claim 59, Krishnarajah and Bender teach the method of claim 58, Krishnarajah further teaches comprising: acknowledging correct reception of the payload packet at the network element on a radio downlink from the network element to the user equipment (acknowledge [0072]), and acknowledging correct reception of the payload packet at the other network element on a radio downlink from the other network element to the user equipment [0072-0074].

Regarding claim 68, Krishnarajah and Bender teach the apparatus of claim 67, Krishnarajah further teaches wherein the network element is arranged to acknowledge

reception of the payload packet, on a radio downlink from the network element to the user equipment (acknowledge [0072]).

Allowable Subject Matter

5. Claim 63 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 63, the prior art of record fails to teach alone or in combination, the apparatus of claim 62, wherein the information is arranged to configure a second radio uplink between the second network element and the user equipment, the first radio network controller being configured to receive a payload packet from the network element over the first interface, the second radio network controller being configured to receive the payload packet from the second network element after receipt by the second network element from the user equipment over the second radio uplink, and the second radio network controller being configured to send the payload packet received from the second network element to the radio network controller following the reception by the second network element from the user equipment for transfer from the second radio network controller to the first radio network controller.

6. Applicant's Remarks/Arguments filed 07/26/2010 have been fully considered but they are not persuasive.

Regarding claims 53, 62, 64, 66, and 67, the Applicant argued that Seo and Pecen do not suggest or teach “at least fail to disclose or suggest receiving at a network element information having both a cell specific parameter and a radio link specific parameter, in respective messages on an interface between the network element and a radio network controller for configuring the radio uplink from a user equipment to the network element”, See page 8 lines 11-16.

In response, the examiner carefully reviewed the Applicant's Remarks. However, Seo explicitly discloses a UE #419 is connecting to the different nodes/base stations and a radio network controller (RNC) #402/#404 **means the radio link**, and different cells, see Figure 4 also shows a RNC sending signal/information to the node/base station that used different radio links, or cells).

Moreover, Seo discloses the parameters in the radio link reconfiguration request message, see Table 2 shows different parameters Col. 8, paragraph [0104]), and determine a decision threshold line for determining the ACK/NACK [0105]).

Additionally, Seo discloses receiving information having both a cell specific parameter (Fig. 4 shows RNC-A and RNC-B receiving information included cells) and a radio link specific parameter (Fig. 4 shows Node-B1-3, or Base Station is included a radio link specific parameter), in respective messages on an interface between a

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network element (Fig. 4 shows Node-B1-3/Base Station, **a base station is a network element as noted**, and using a radio resource control message [0040]) and a radio network controller for configuring the radio uplink from a user equipment to the network element (Fig. 4 shows RNC A/B configured interfaced to/from UE #419 via Node-B1-3, or Base Station to RNC A/B, [0029-0031], and [0040])

Furthermore, Pecen indeed clearly discloses downlink and uplink transmission between mobile station and base station, see Fig. 8, and parameters assignment, Col. 2 line 62 to Col. 3 shows **the transmission control protocol** that supporting/handling the information elements which should provided to setup interfaces between the RNCs, and the nodes/base stations in order to **setup, scheduling and re-configure** the channel that support the air interface within a mobile communications networks, for example stream or user data and/or traffic such as voice, video, stream, multimedia, text, and data, etc. As skilled in the art would understand the retransmission control signaling procedure as shown in 3GPP network due to data transmission in a GPRS/EDGE system, and in particular, the present invention relates to set up of an uplink packet data transfer in a GPRS/EDGE system using an indirect carrier sense multiple access with directed acknowledgement (see Col. 1 lines 7-12), and receiving a packet control acknowledge message 222 from GPRS/EDGE (see Col. 5 lines 17-56).

In view of the above the rejections using Seo and Pecen are maintained. This rejection is made FINAL.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 50-64, 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2003/0232622) in view of Pecun et al (US 7,181,223).**

Regarding claims 53, 62, 64, 66, and 67, Seo teaches a method of configuring a radio uplink (transmitting and receiving an uplink [0003], and uplink control channel [0026]) comprising:

receiving information having both a cell specific parameter (Fig. 4 shows RNC-A and RNC-B receiving information included cells) and a radio link specific parameter (Fig. 4 shows Node-B1-3, or Base Station is included a radio link specific parameter), in respective messages on an interface between a network element (Fig. 4 shows Node-B1-3/Base Station, **a base station is a network element as noted**, and using a radio resource control message [0040]) and a radio network controller for configuring the radio uplink from a user equipment to the network element (Fig. 4 shows RNC A/B configured interfaced to/from UE #419 via Node-B1-3, or Base Station to RNC A/B, [0029-0031], and [0040])

configuring the radio uplink at the network element (Node-B1-3, or Base Station, or network element configured/reconfigured a radio link includes message, [0040, [0101-0105]), and

Seo does not clearly teach receiving a payload packet from the user equipment to the network element over the radio uplink after the uplink is configured at the network element, wherein at least one of said respective messages enables said configuring the radio uplink.

However, Pecen teaches receiving a payload packet from the user equipment to the network element over the radio uplink after the uplink is configured at the network element (Figs. 6-8 shows a base station #320 received data from a mobile station #322, and Fig. 4 shows data payload); wherein at least one of said respective messages enables said configuring the radio uplink (Col. 2, lines 1-16), and (Col. 8, lines 48-67)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Seo, with Pecen's teaching, in order to enhance the radio resources for supporting the mobile station in the use of radio and network resources in an efficiently such as packet switched network radio environment, e.g., GSM/GPRS system etc.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael T. Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MICHAEL T VU/
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617